Change to Conservation Measure for the Western Least Bittern
Lower Colorado River Multi-Species Conservation Program
Draft Program Decision Document 20-003

Steering Committee Motion

The Steering Committee approves Reclamation's recommended changes to conservation measure LEBI1 to revise western least bittern water depths, specifically:

LEBI1—Create 512 acres of western least bittern habitat. Create and manage 512 acres of marsh to provide western least bittern habitat ~~(Figure 5-2)~~. This created habitat will also be habitat for the Yuma clapper rail (conservation measure CLRA1). Habitat will be created in patches as large as possible. Smaller patches are likely within the range of habitat patch sizes used by the species for foraging and dispersal, and larger patches may be used for breeding. Western least bittern habitat will be created and maintained as described in Section 5.4.3.3. Marshes created to provide western least bittern habitat will be designed and managed to provide an integrated mosaic of wetland vegetation types, water depths, and open water areas. Priority will be given, when consistent with achieving LCR MSCP goals for other covered species, to establishing habitat near occupied habitat. The largest numbers of western least bitterns in the LCR MSCP planning area are located at Topock Marsh and marshes near Imperial Dam, but they are present in suitable marshes throughout the LCR MSCP planning area. Within this mosaic of marsh conditions, western least bittern habitat will generally be provided by patches of bulrush and cattails interspersed with small patches of open water ~~that maintain water depths no greater than 12 inches~~with water levels maintained at depths appropriate for this species. Created marsh habitat will generally be managed to provide for gradual fluctuations in water level during Western least bittern breeding season (March – June).

Current Conservation Measures

5.7.12.2 Conservation Measures (LCR MSCP 2004)

LEBI1—Create 512 acres of western least bittern habitat. *Create and manage 512 acres of marsh to provide western least bittern habitat (Figure 5-2). This created habitat will also be habitat for the Yuma clapper rail (conservation measure CLRA1). Habitat will be created in patches as large as possible. Smaller patches are likely within the range of habitat patch sizes used by the species for foraging and dispersal, and larger patches may be used for breeding. Western least bittern habitat will be created and maintained as described in Section 5.4.3.3. Marshes created to provide western least bittern habitat will be designed and managed to provide an integrated mosaic of wetland vegetation types, water depths, and open water areas. Priority will be given, when consistent with achieving LCR MSCP goals for other covered species, to establishing habitat near occupied habitat. The largest numbers of western least bitterns in the LCR MSCP planning area are located at Topock Marsh and marshes near Imperial Dam, but they are present in suitable marshes throughout the LCR MSCP planning area. Within this mosaic of marsh conditions, western least bittern habitat will generally be provided by patches of bulrush and cattails interspersed with small patches of open water that maintain water depths no greater than 12 inches.*

Justification

According to the Habitat Conservation Plan, the marsh habitat created by the LCR MSCP must maintain water levels at appropriate depths for this species, which is defined as no more than 12 inches. The LCR MSCP has interpreted this as water levels at created marsh habitat will be maintained between 0 and 12 inches at all times. Scientific literature has described habitat for this species with the highest abundance as having depths closer to 24 inches (Jobin et al. 2009). There has also been no significant difference found in water depths between areas with and without least bittern detections and areas with detections had depths up to 30 inches (Moore et al. 2009, Poole 2009). The 12-inch limit reduces the LCR MSCP's ability to fluctuate marsh levels to encourage a mixture of cattail and rush species and manage salt levels. Removal of the specific water depth will not change the intent of the conservation measure, to create and manage appropriate habitat for the species, using the best available information. It should increase management flexibility and habitat quality.

Literature Cited

Jobin, B., L. Robillard, and C. Latendresse. 2009. Response of a Least Bittern (*Ixobrychus exilis*) population to interannual water level fluctuations. *Waterbirds, 32*(1), 73-80.

Lower Colorado River Multi-Species Conservation Program (LCR MSCP). 2004. Lower Colorado River Multi-Species Conservation Program, Volume II: Habitat Conservation Plan, Final. December 17 (J&S 00450.00). Sacramento, California.

Moore, S., J. R. Nawrot, and J. P. Severson. 2009. Wetland-scale habitat determinants influencing Least Bittern use of created wetlands. *Waterbirds, 32*(1), 16-24.

Poole, A. F., P. E. Lowther, J. P. Gibbs, F. A. Reid, and S. M. Melvin. 2009. Least Bittern (*Ixobrychus exilis*), version 2.0. In *The Birds of North America* (A. F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.17